WHAT IS CLAIMED IS:

1. A driver for driving a liquid crystal display, comprising:

an input terminal that inputs input data;

an output terminal that outputs output data;

a bi-directional common driver equipped with a first input/output terminal and a second input/output terminal, an input/output relationship of the first input/output terminal and the second input/output terminal being reversed in accordance with a shift direction controlled by a control signal;

means for switching that is disposed between the input terminal and the first and the second input/output terminals of the bi-directional common driver and that selectively inputs the input data from the input terminal to one of the first input/output terminal and the second input/output terminal; and

means for switching that is disposed between the output terminal and the first and the second input/output terminals of the bi-directional common driver and that selectively leads and outputs the output data to the output terminal, the output data being output from one of the first and the second input/output terminals and the input data being input to the other of the first and the second input/output terminals by the means for switching.

2. The driver for driving a liquid crystal display according to claim 1, wherein the means for switching includes a first switching circuit that is disposed between the input terminal and the first input/output terminal of the bi-directional common driver and a second switching circuit that is disposed between the input terminal and the second input/output terminal of the bi-directional common driver.

3. A method of driving a driver of a liquid crystal display, comprising:

providing an input terminal that inputs input data;

providing an output terminal that outputs output data;

providing a bi-directional common driver equipped with a first input/output terminal and a second input/output terminal, an input/output relationship of the first input/output terminal and the second input/output terminal being reversed in accordance with a first direction and a second direction of a shift direction controlled by a control signal;

providing an input switching unit that selectively inputs the input data from the input terminal to one of the first input/output terminal and the second input/output terminal; and

providing an output selecting unit that selectively leads the output data to the output terminal, the output data being output from one of the first and the second input/output terminals and the input data being input to the other of the first and the second input/output terminals by the input switching unit.

4. The driver for driving a liquid crystal display according to claim 2 wherein the means for switching inputs the input data from the input terminal to the first input/output terminal by switching "on" the first switching circuit if the shift direction controlled by the control signal is in a first direction.

5. The driver for driving a liquid crystal display according to claim 2 wherein the means for switching inputs the input data from the input terminal to the second input/output terminal by switching "on" the second switching circuit if the shift direction controlled by the control signal is in a second direction.

6. The driver for driving a liquid crystal display according to claim 1 wherein the means for switching includes a selector that is a two-input selector and that has a first input port connected to the first input/output terminal of the bi-directional common driver and a second input port connected to the second input/output terminal of the bi-directional common driver.

7. The driver for driving a liquid crystal display according to claim 1 wherein the means for switching outputs the output data from the second input/output terminal to the output terminal by selecting the second input port of the selector if the shift direction controlled by the control signal is in the first direction.

8. The driver for driving a liquid crystal display according to claim 1 wherein the means for switching outputs the output data from the first input/output terminal to the output terminal by selecting the first input port of the selector if the shift direction controlled by the control signal is in the second direction.

9 . A driver for driving a liquid crystal display, comprising:

an input terminal that inputs input data;

an output terminal that outputs output data;

a bi-directional common driver equipped with a first input/output terminal and a second input/output terminal, an input/output relationship of the first input/output terminal and the second input/output terminal being reversed in accordance with a shift direction controlled by a control signal;

an input switching unit that is disposed between the input terminal and the first and the second input/output terminals of the bi-directional common driver and that selectively inputs the input data from the input terminal to one

of the first input/output terminal and the second input/output terminal; and

an output selecting unit that is disposed between the output terminal and the first and the second input/output terminals of the bi-directional common driver and that selectively leads and outputs the output data to the output terminal, the output data being output from one of the first and the second input/output terminals and the input data being input to the other of the first and the second input/output terminals by the input switching unit.

10. The driver for driving a liquid crystal display according to claim 9, wherein the input switch unit includes a first switching circuit that is disposed between the input terminal and the first input/output terminal of the bi-directional common driver and a second switching circuit that is disposed between the input terminal and the second input/output terminal of the bi-directional common driver.

11. The driver for driving a liquid crystal display according to claim 10 wherein the input switching unit inputs the input data from the input terminal to the first input/output terminal by switching "on" the first switching circuit if the shift direction controlled by the control signal is in a first direction.

12. The driver for driving a liquid crystal display according to claim 10 wherein the input switching unit inputs the input data from the input terminal to the second input/output terminal by switching "on" the second switching circuit if the shift direction controlled by the control signal is in a second direction.

13. The driver for driving a liquid crystal display according to claim 9 wherein the output selecting unit includes a selector that is a two-input selector

and that has a first input port connected to the first input/output terminal of the bi-directional common driver and a second input port connected to the second input/output terminal of the bi-directional common driver.

14 . The driver for driving a liquid crystal display according to claim 9 wherein the output selecting unit outputs the output data from the second input/output terminal to the output terminal by selecting the second input port of the selector if the shift direction controlled by the control signal is in the first direction.

15. The driver for driving a liquid crystal display according to claim 9 wherein the output selecting unit outputs the output data from the first input/output terminal to the output terminal by selecting the first input port of the selector if the shift direction controlled by the control signal is in the second direction.

16. The method of driving a liquid crystal display according to claim 3 further comprising inputting the input data from the input terminal to the first input/output terminal of the bi-directional common driver if the shift direction controlled by the control signal is in the first direction.

17. The method of driving a liquid crystal display according to claim 3 further comprising outputting the output data from the second input/output terminal of the bi-directional common driver to the output terminal if the shift direction controlled by the control signal is in the first direction.

18. The method of driving a liquid crystal display according to claim 3 further comprising inputting the input data from the input terminal to the

second input/output terminal of the bi-directional common driver if the shift direction controlled by the control signal is in the second direction.

19. The method of driving a liquid crystal display according to claim 3 further comprising outputting the output data from the first input/output terminal of the bi-directional common driver to the output terminal if the shift direction controlled by the control signal is in the second direction.

20. The method of driving a liquid crystal display according to claim 3 further comprising providing a selector that is a two-input selector and that has a first input port connected to the first input/output terminal of the bi-directional common driver and a second input port connected to the second input/output terminal of the bi-directional common driver.